

5
Work Order ID 121310

June 23-14 12:35:29 PM

Split -1

121310

For Shiny

Page 1

Item ID: D3602-1

Revision ID:

Item Name: Angle

Start Date: 6/23/14 Start Qty: 50.00

Required Date: 7/21/14 Req'd Qty: 50.00

Reference:

Accept *N900040100* Setup Start *NS1*
Stop *NS2*

50 (2) Cust Item ID:
50 (2) Customer:

Approvals: Process Plan: J Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D3602	Rev B								

105 0.00

105

Purchasing

Purchasing

Memo 0.00

USE STAINLESS WITH PLASTIC WRAP

1-Cut as per Dwg D3602
Dwg Rev: _____

Prog Rev: _____ P/O: 24728

2-Deburr if necessary

115 0.00

115

Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs 0.00

Memo 0.00

CL 14/06/23 50

17/7/20 (50)

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only 

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General				
Bending	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>	
Centre Not Concentric	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>	
Cracks	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>	
Crimp/Kink/Ripple/Wave	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>	
Cuffs	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>	
Crushing	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>		
Heat Treat	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>		
Inspection Strip in Tube	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>			
Marks/Chatter	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>			
Turning Sequence	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>			
Wave/Twist in Tube	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>			

Work Order ID 121310

June 23-14 12:35:29 PM

121310

Page 2

Item ID: D3602-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Angle

Stop

NS2

Start Date: 6/23/14

Start Qty: 50.00

50

Cust Item ID:

Required Date: 7/21/14

Req'd Qty: 50.00

50

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

125

125

QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

Shf
MHS

2

130

130

Small Fab

Small Fab

0.00

Small Fab

Memo

0.00

Form as per Dwg D3602

N/A Shf
14/7/25

140

140

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>		
NCR No. _____							

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence Wave/Twist in Tube	General	Bend BOM/Route Broken/Damage/Defect Burr Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function	Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set Out of Calibration Out of Sequence	Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled	Other
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Work Order ID 121310

June-23-14 12:35:29 PM

121310

Page 3

Item ID: D3602-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Angle

Stop

NS2

Start Date: 6/23/14

Start Qty: 50.00

50

Cust Item ID:

Required Date: 7/21/14

Req'd Qty: 50.00

50

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

Identify as per dwg & Stock Location:

0.00

150

Packaging

Memo

0.00

Packaging

wrap parts separately and properly to avoid scratches.

2 8 14-07-25

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.00

Quality Control

14/7/2014

DR-7-25

DQA:

Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: _____

Work Order update only

Work Order: _____
 Part No. _____
 NCR No. _____

DISPOSITION

Rework
Scrap
Use-as-is
Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

Skid-tube
Machining
Thermoforming
Large Fab

Crosstube
Small Fab
Finishing
Composite

Water Jet
Prod. Eng. Coor.
Rec/Store/Packaging
Supplier

Engineering
Quality
Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General			
Bending	Bend			
Centre Not Concentric	BOM/Route			
Cracks	Broken/Damage/Defect			
Crimp/Kink/Ripple/Wave	Burrs			
Cuffs	Contamination			
Crushing	Countersink			
Heat Treat	Cut Too Short			
Inspection Strip in Tube	Drawing			
Marks/Chatter	Drill Holes			
Turning Sequence	Finish			
Wave/Twist in Tube	Fit/Function			

Picklist Print

June-23-14 12:35:29 PM

Page 1

Work Order ID: 121310

121310
D3602-1

Parent Item: D3602-1

Parent Item Name: Angle

Start Date: 6/23/14

Required Date: 7/21/14

Start Qty: 50.00

Required Qty: 50.00

Comments: IPP Rev:A New Issue 07-02-27 JLM
IPP Rev:B 08-12-11 as per ECN08-577 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3602-1P Angle		Purchased	No				Each	0.0000		50	2	24/7/25 (50)	**

D3602-1P

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

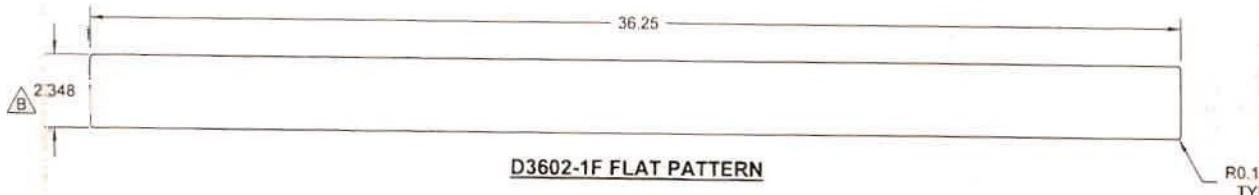
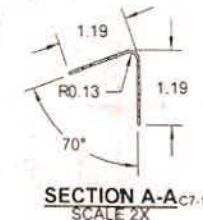
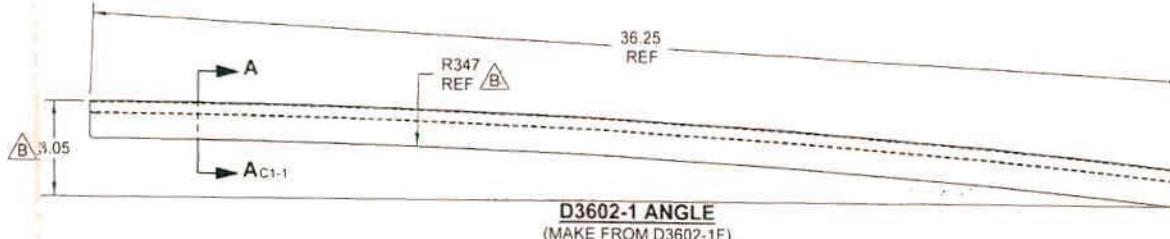
Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced
	Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up
	Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure
	Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld
	Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled
	Crushing	Countersink	Misaligned/off center	Positioned Wrong	
	Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge	Other
	Inspection Strip in Tube	Drawing	Misread		
	Marks/Chatter	Drill Holes	Off-set		
	Turning Sequence	Finish	Out of Calibration		
	Wave/Twist in Tube	Fit/Function	Out of Sequence		

12130



RELEASED
09/03/11 MWD

- A NOTES:
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 20 GAUGE, 0.038 THICK, PER AMS 5513 OR AMS 5524, REF. DART SPEC. M304S20GA
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFY WITH DART P/N "D3602-1" USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: 0.97 lbs

B	ADDED ROUNDED SHAPE- R347 REF AND 3.05; 2.348 WAS 2.328. REF: NCR#09-014	MB	09.02.02
A	NEW ISSUE	MB	07.02.20
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	A
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3602	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		ANGLE	NTS
DATE	09.02.02	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending	General	Folio/Program	Outside Dimensions	Pressure/Forced
	Centre Not Concentric	Bend	Grain	Over/Under tolerance	Set-up
	Cracks	BOM/Route	Hardware	Part Incorrect	Temperature/Cure
	Crimp/Kink/Ripple/Wave	Broken/Damage/Defect	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld
	Cuffs	Burrs	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled
	Crushing	Contamination	Misaligned/off center	Positioned Wrong	
	Heat Treat	Countersink	Mislabeled	Power Loss/Surge	Other
	Inspection Strip in Tube	Cut Too Short	Misread		
	Marks/Chatter	Drawing	Off-set		
	Turning Sequence	Drill Holes	Out of Calibration		
	Wave/Twist in Tube	Finish	Out of Sequence		
		Fit/Function			

Linda Lacelle

From: Nigel Forbes
Sent: June-23-14 12:16 PM
To: Linda Lacelle
Subject: Re: rfq

Sold

Sent from my iPhone

On Jun 23, 2014, at 11:57 AM, "Linda Lacelle" <llacelle@dartaero.com> wrote:

These are the parts Sylvie has been struggling with...I say we just bite the bullet and order 50 of these...your thoughts?

From: Pedro Mendez [<mailto:pedro.mendez@tnb.com>]
Sent: June-23-14 11:19 AM
To: Linda Lacelle
Subject: Re: rfq

Hi Linda parts will not marks but 304 -5513 not have # 4 finish did you need that type of finish ? if yes I can offer to pass at the Time saver and get 180 grain

Regards

Pedro Mendez
Représentant technique
Technical Sales Representative
Thomas & Betts Manufacturing Inc. - GFI Division
180 Avenue Labrosse, Pointe-Claire
Quebec, Canada H9R 1A1

 (514) 630-4877- EXT 228
 (514) 630-4849
Email: pedro.mendez@tnb.com

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled

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<http://groupwise.tnb.com/disclaimer/>

On Mon, Jun 23, 2014 at 10:54 AM, Linda Lacelle <llacelle@dartaero.com> wrote:

Perfect, I will send a PO today. Can you ensure the parts will be shiny, no marks ? material must be 4P finish.

Thx

Linda

From: Pedro Mendez [mailto:pedro.mendez@tnb.com]
Sent: June-23-14 10:46 AM
To: Linda Lacelle
Subject: Re: rfq

Hi Linda

Rfq for D3602-1

10 pcs = 108.00\$ each

20 pcs = 62.00\$ each

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
Part No. _____			Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Design										
Doc/Data										
Equip/Tooling										
Handling/Pre										
Material										
Operator										
Offset/Setup										
Process										
Supplier										
Training										
Transport										
Unapproved										
FAULT CATEGORY										
Landing Gear				General						
Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced						
Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up						
Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure						
Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld						
Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled						
Crushing	Countersink	Misaligned/off center	Positioned Wrong							
Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge	Other						
Inspection Strip in Tube	Drawing	Misread								
Marks/Chatter	Drill Holes	Off-set								
Turning Sequence	Finish	Out of Calibration								
Wave/Twist in Tube	Fit/Function	Out of Sequence								

• 50 pcs = 34.00\$ each

4 weeks delivery cad filr required

Regards

Pedro Mendez

Représentant technique

Technical Sales Representative

Thomas & Betts Manufacturing Inc. - GFI Division

180 Avenue Labrosse, Pointe-Claire
Quebec, Canada H9R 1A1

 (514) 630-4877- EXT 228

 (514) 630-4849

Email: pedro.mendez@tnb.com

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L'avis de confidentialité est à ce site.

DQA:

Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: _____

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending	General	Folio/Program	Outside Dimensions	Pressure/Forced
	Centre Not Concentric	Bend	Grain	Over/Under tolerance	Set-up
	Cracks	BOM/Route	Hardware	Part Incorrect	Temperature/Cure
	Crimp/Kink/Ripple/Wave	Broken/Damage/Defect	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld
	Cuffs	Burrs	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled
	Crushing	Contamination	Misaligned/off center	Positioned Wrong	
	Heat Treat	Countersink	Mislabeled	Power Loss/Surge	Other
	Inspection Strip in Tube	Cut Too Short	Misread		
	Marks/Chatter	Drawing	Off-set		
	Turning Sequence	Drill Holes	Out of Calibration		
	Wave/Twist in Tube	Finish	Out of Sequence		
		Fit/Function			



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO24728

Purchase Order Date 6/23/2014

PO Print Date 6/23/2014

Page Number 1 of 2

Order From : VC-GFI001
GFI
180 AVENUE LABROSSE
POINTE CLAIRE, QC H9R 1A1
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA



Contact Name		Buyer	Chantal Lavoie
Vendor Phone	514 630 4877	Customer POID	
Ship To Contact		Customer Tax #	10127-2607
Ship To Phone		Terms	Net 30
Ship Via:	FedEx PI collect	Currency	CAD
Ship Acct:		FOB	FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D3602-1P	Angle	7/21/2014 Yes 7/21/2014		50.00 Each	\$34.00	\$1,700.00
	MACHINE AS PER DWG D3602 REV. B B121310					Line Total:	\$1,700.00
2	71401-45	PROCUREMENT QUALITY CLAUSES	7/21/2014 No 7/21/2014		1.00	\$0.00	\$0.00
	PROCUREMENT QUALITY CLAUSES A005 RIGHT OF ENTRY A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE) A012 CHEMICAL AND PHYSICAL TEST REPORTS A016 PERSONNEL QUALIFICATION A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE) A026 CERTIFICATION OF MATERIAL CONFORMANCE A041 QUALITY MANAGEMENT SYSTEM A042 DART NOTIFICATION BY SUPPLIER A043 RETENTION OF QUALITY DOCUMENT						

Note:

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____	DISPOSITION				
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

AGAINST DEPARTMENT/PROCESS

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending	General	Folio/Program	Outside Dimensions	Pressure/Forced
	Centre Not Concentric	Bend	Grain	Over/Under tolerance	Set-up
	Cracks	BOM/Route	Hardware	Part Incorrect	Temperature/Cure
	Crimp/Kink/Ripple/Wave	Broken/Damage/Defect	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld
	Cuffs	Burrs	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled
	Crushing	Contamination	Misaligned/off center	Positioned Wrong	
	Heat Treat	Countersink	Mislabeled	Power Loss/Surge	
	Inspection Strip in Tube	Cut Too Short	Misread		
	Marks/Chatter	Drawing	Off-set		
	Turning Sequence	Drill Holes	Out of Calibration		
	Wave/Twist in Tube	Finish	Out of Sequence		
		Fit/Function			



180 AVENUE LABROSSE
POINTE-CLAIRE, QC, CANADA H9R 1A1
TÉL.: (514) 630-4877 - FAX: (514) 630-4849

GFI est une division de Thomas & Betts Limited / GFI is a division of Thomas & Betts Limited



BON DE LIVRAISON / SHIPPING MEMO

DATE DE LIVRAISON / SHIPPING DATE				NUM. DE BON DE LIVRAISON / SHIPPING MEMO NO.	PAGE
JR	MO	AN	YR		
24	07	14		0541476	1/1



EXPÉDIÉ À / SHIP TO

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON
K6A 1K7

CODE DE CLIENT CUSTOMER CODE	N° DE CONTRAT JOB NO.	VOTRE N° DE COMMANDE YOUR PURCHASE ORDER NO.	EXPÉDIÉ PAR SHIP VIA
QUANTITÉ QUANTITY	N° DE PIÈCE PART NO.	DESCRIPTION	
DART	GFI-0299	0287922	PO24728
50	D3602-1P	ANGLE ITEM 1 C OF C REQ'D FAI REQ'D	
	MFG. JOB# JO287922-001 QTY 50		
	DUE DATE: JULY 21 2014		
			EXPÉDITEUR SHIPPER

REÇU PAR / RECEIVED BY

DATE

TOUTES LES RÉCLAMATIONS DOIVENT ÊTRE FAITES EN DEDANS DE 5 JOURS DE LA RÉCEPTION.
ALL CLAIMS MUST BE MADE WITHIN 5 DAYS OF RECEIPT OF GOODS.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

Work Order: _____	DISPOSITION		
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>

AGAINST DEPARTMENT/PROCESS

Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>
Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced Set-up <input type="checkbox"/>
	Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
	Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>
	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	
	Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
	Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	
	Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		
	Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
	Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

CERTIFICATE OF COMPLIANCE

CERTIFICAT DE CONFORMITE



Membre de / A Member of **Thomas & Betts**

180 LABROSSE AVENUE
POINTE CLAIRE, QC
H9R 1A1

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7

CERTIFICATE NO.	1	OUR JOB NO	J0287922	SHIPPING MEMO	0541476	
ITEM	QUANTITY	PURCHASE ORDER	PART NUMBER	REV	NAME	DWG ISSUE
--	50 PCS	PO24728	D3602-1P	B	CUPPED WASHER	B
MATERIAL		SUPPLIED BY			MAT. REL. NO.	
.040 THK AMS 5513 304 ANN		TW METALS / NORTH AMERICAN			H/N # J5A8	

	PROCESS	PROCESSOR	RELEASE NOTE #
1	FIRST ARTICLE INSPECTION REPORT ATTACHED	GFI	N/A
2	REF. GFI MANUFACTURING JOB NUMBER J0287922-001 (50 PCS)	GFI	N/A
3			
4			
5			
6			
7			
8			
9			

WE HEREBY CERTIFY ALL THE PARTS COVERED BY THIS CERTIFICATE HAVE BEEN MANUFACTURED FROM MATERIAL SUPPLIED ON RELEASE NOTE SHOWN ABOVE AND THAT ALL PARTS HAVE BEEN INDIVIDUALLY INSPECTED AND CONFORM TO THE DRAWINGS AND PURCHASE ORDER REFERENCED ABOVE.

DATE 23 JULY 2014

G.F.I. Q.C. REP.



DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced Set-up <input type="checkbox"/>
	Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
	Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>
	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	
	Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
	Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	
	Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		
	Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
	Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		



O'Neal High-Performance Metals Group

1 Wright Avenue - Rear
LeRoy NY 14482
Tel: 585-768-5600
FAX: 15857685601

CERTIFICATE OF COMPLIANCE

Your Order Number: 0084131

Our delivery receipt Number: 12099422

Date: 5/09/14

This is to certify that the material shipped against the above order on the above delivery receipt, consisting of:

Quantity: 68.000 LB

Line Number: 1 Grade: 304 ANNEALED AMS5513 .040

Part #: TS040481204A

Heat Number: J5A8J

Specification: _____

Complies in all respects with the item description.



BY: Janice Clark

Authorized Test Department Clerk

DQA: _____ Date: _____

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
Part No. _____			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
NCR No. _____			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
			Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Design <input type="checkbox"/>											
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Handling/Pre <input type="checkbox"/>											
Material <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Offset/Setup <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Transport <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear			General								
Bending <input type="checkbox"/>	Bend <input type="checkbox"/>		Folio/Program <input type="checkbox"/>			Outside Dimensions <input type="checkbox"/>		Pressure/Forced <input type="checkbox"/>			
Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>		Grain <input type="checkbox"/>			Over/Under tolerance <input type="checkbox"/>		Set-up <input type="checkbox"/>			
Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>		Hardware <input type="checkbox"/>			Part Incorrect <input type="checkbox"/>		Temperature/Cure <input type="checkbox"/>			
Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>		Inspection Incomplete/Unqualified <input type="checkbox"/>			Part Lost/Missing <input type="checkbox"/>		Weld <input type="checkbox"/>			
Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>		Instructions Incomplete/Unclear <input type="checkbox"/>			Part Moved <input type="checkbox"/>		Wrong Stock Pulled <input type="checkbox"/>			
Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>		Misaligned/off center <input type="checkbox"/>			Positioned Wrong <input type="checkbox"/>					
Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>		Mislabeled <input type="checkbox"/>			Power Loss/Surge <input type="checkbox"/>					
Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>		Misread <input type="checkbox"/>			Other <input type="checkbox"/>					
Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>		Off-set <input type="checkbox"/>								
Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>		Out of Calibration <input type="checkbox"/>								
Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>		Out of Sequence <input type="checkbox"/>								

UNITED PERFORMANCE METALS

This is to certify that in accordance with the records in our files the material shipped on your purchase order conforms to the following.

Size: 48 X 120
P.O.: D12015628
Part#: NORTH AMERICAN
STAINLESS
Sales #: 01228567
Quantity: 1

Description: 304/304L ANN. 038-042 AMS5513 PVC
Customer: GFI Incorporated
Shipped: 04/30/2014
Heat: J5A8



NORTH AMERICAN
STAINLESS

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Irina Garrett

Certificate: 868822 02 Mail To: UNITED PERFORMANCE METALS Ship To: UNITED PERFORMANCE METALS Date: 9/10/2013 Page: 1
 Customer: 0018 001 3475 SYMMES ROAD 3475 SYMMES ROAD Steel: 302/304/304L
 HAMILTON, OH 45015 HAMILTON, OH 45015 Finish: 2B

Your Order: 01023126 NAS Order: AN 0582364 01 Corrosion: ASTM A262/10; 180 Bend-OK

PRODUCT DESCRIPTION:	REMARKS:
S/S COIL, C.R.ANNEALED & PICKLED; UNS 30400/30403/30200 ASTM A240/13a,A480/13,A666/10;ASME SA240/11a,SA480/11a,SA666/11a CHEM ONLY ON FOLLOWING ASTM: A276/13,A479/13a,A484/13a,A312/13 CHEM ONLY ON FOLLOWING ASME: SA312/11,SA479/11 AMS 5511H/5513J/5516P XMRK;MIL-S-5059D AMD3(X CRN MEAS);MIL-4043B NACE MR0175/ISO 15156-3:2003 A, MR0103/07;QQS766D-A X MAG PERM MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED	Mat'l is Free of Mercury Contamination. No weld repairs. EN 10204:2004 3.1; RoHS 1 & 2 Compliant Material is Free of Radioactive Contamination MAS Steel Making Process: EAF, AOD, & Cont. Casting Product Mfg. by a Quality Mgt.Sys. in Conf. w/ISO 9001 *Melted & Manufactured in the USA; Mat'l is DFARS Compliant

Product ID	Supplier ID	Thickness	Width	Weight	Length	Mark	Pieces	COMMODITY CODE
03J5A8 A	* 03J5A8	.0401	48.0000	25,740	COIL	3920.0	11	1

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Chemical analysis per ASTM A751/08

HEAT Supplier#	CM	C %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
J5A8 J5A8	US	.0171	18.0335	.4285	1.7885	.3570	.0827	8.0085	.0315	.0010
SI %										

MECHANICAL PROPERTIES

Product Id	Supplier Id	UTS KSI	.2% YS KSI	ELONG %-2"	Hard RB	Tail Hard	180 Br 0.0"	Grain No.	D Fer F.N.	REVIEWED/APPROVED BY UPM QC
03J5A8 A	03J5A8	F T 95.23	44.99	54.73	83.00	85.00	OK	9.00	2.66	SPECs: AMS 5511H/5513J/5516P, ASTM-A-240-13 BY: PI DATE 9-16-13 TOTAL PAGES 1

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

ERIC HESS

9/10/2013

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
Part No. _____			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
NCR No. _____			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
			Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Design <input type="checkbox"/>											
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Handling/Pre <input type="checkbox"/>											
Material <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Offset/Setup <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Transport <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear			General								
Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>							
Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>							
Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>							
Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>							
Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>							
Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>								
Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>								
Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>									
Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>									
Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>									
Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>									
				Other <input type="checkbox"/>							

Form 1: Part Number Accountability

Sheet 1 of 3

1. Part Number D3602-1P	2. Part Name ANGLE	3. Serial Number NA	4. FAI Report Number D3602-1P REV B
5. Part Revision Level REV. B	6. Drawing Number D3602	7. Drawing Revision Level REV. B	8. Additional Changes N/A
9. Manufacturing Process Reference J0287922-001	10. Organization Name GFI	11. Supplier Code VC-GFI001	12. P.O. Number PO24728 ITEM 1
13. Detail FAI <input checked="" type="checkbox"/>	14. Full FAI <input checked="" type="checkbox"/> Partial FAI <input type="checkbox"/>	Baseline Part Number including revision level	
Assembly FAI <input type="checkbox"/>	Reason for Partial FAI:		

- a) if above part number is a detail part only, go to Field 19
 - b) if above part number is an assembly, go to the 'INDEX' section below.

INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.

- 1) Signature indicates that all characteristics are accounted for, meet drawing requirements, or are properly documented for disposition.

- 2) Also indicate if the FAI is complete per Section 5.4: FAI complete

FAI not complete

19 Signature

20. Date

21. Reviewed By DALTON HAROLD

22. Date
24 JULY 2014

23. Customer Approval

24. Date

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS						
Part No. _____	Rework	<input type="checkbox"/>	Skid-tube	<input type="checkbox"/>	Crosstube	<input type="checkbox"/>	Water Jet	<input type="checkbox"/>	Engineering	<input type="checkbox"/>
NCR No. _____	Scrap	<input type="checkbox"/>	Machining	<input type="checkbox"/>	Small Fab	<input type="checkbox"/>	Prod. Eng. Coor.	<input type="checkbox"/>	Quality	<input type="checkbox"/>
	Use-as-is	<input type="checkbox"/>	Thermoforming	<input type="checkbox"/>	Finishing	<input type="checkbox"/>	Rec/Store/Packaging	<input type="checkbox"/>	Other	<input type="checkbox"/>
	Suspected Unapproved	<input type="checkbox"/>	Large Fab	<input type="checkbox"/>	Composite	<input type="checkbox"/>	Supplier	<input type="checkbox"/>		

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General									
Bending	<input type="checkbox"/>	Bend	<input type="checkbox"/>	Folio/Program	<input type="checkbox"/>	Outside Dimensions	<input type="checkbox"/>	Pressure/Forced		
Centre Not Concentric	<input type="checkbox"/>	BOM/Route	<input type="checkbox"/>	Grain	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>	Set-up		
Cracks	<input type="checkbox"/>	Broken/Damage/Defect	<input type="checkbox"/>	Hardware	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>	Temperature/Cure		
Crimp/Kink/Ripple/Wave	<input type="checkbox"/>	Burrs	<input type="checkbox"/>	Inspection Incomplete/Unqualified	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>	Weld		
Cuffs	<input type="checkbox"/>	Contamination	<input type="checkbox"/>	Instructions Incomplete/Unclear	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>	Wrong Stock Pulled		
Crushing	<input type="checkbox"/>	Countersink	<input type="checkbox"/>	Misaligned/off center	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>			
Heat Treat	<input type="checkbox"/>	Cut Too Short	<input type="checkbox"/>	Mislabeled	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>	Other		
Inspection Strip in Tube	<input type="checkbox"/>	Drawing	<input type="checkbox"/>	Misread	<input type="checkbox"/>		<input type="checkbox"/>			
Marks/Chatter	<input type="checkbox"/>	Drill Holes	<input type="checkbox"/>	Off-set	<input type="checkbox"/>		<input type="checkbox"/>			
Turning Sequence	<input type="checkbox"/>	Finish	<input type="checkbox"/>	Out of Calibration	<input type="checkbox"/>		<input type="checkbox"/>			
Wave/Twist in Tube	<input type="checkbox"/>	Fit/Function	<input type="checkbox"/>	Out of Sequence	<input type="checkbox"/>		<input type="checkbox"/>			

Form 2: Product Accountability - Raw Material, Specifications, and Special Process(es). Functional Testing Sheet 2 of 3

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending	General	Folio/Program	Outside Dimensions	Pressure/Forced
	Centre Not Concentric	Bend	Grain	Over/Under tolerance	Set-up
	Cracks	BOM/Route	Hardware	Part Incorrect	Temperature/Cure
	Crimp/Kink/Ripple/Wave	Broken/Damage/Defect	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld
	Cuffs	Burrs	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled
	Crushing	Contamination	Misaligned/off center	Positioned Wrong	
	Heat Treat	Countersink	Mislabeled	Power Loss/Surge	Other
	Inspection Strip in Tube	Cut Too Short	Misread		
	Marks/Chatter	Drawing	Off-set		
	Turning Sequence	Drill Holes	Out of Calibration		
	Wave/Twist in Tube	Finish	Out of Sequence		
		Fit/Function			

Form 3: Characteristic Accountability, Verification and Compatibility Evaluation

Sheet 3 of _3

1. Part Number D3602-1P			2. Part Name ANGLE	3. Serial Number N/A		4. FAI Report D3602-1P REV. B	
Characteristic Accountability			Inspection/Test Results				
5. Char No.	6. Reference Location	7. Characteristic Designator	8. Requirement	9. Results	10. Designed Tooling	11. Non conformance no.	14. (Insert columns, etc, as required by Organization or customer)
1	SHEET 1 OF 1	NOTE 1	MATERIAL : AISI 304 /316 SST 20 GAUGE, 0.038 THK	040 THK AMS 5513 304 ANN TW METALS / NORTH AMERICAN C/C # JSA8	POINT MIC, VISUAL	ACCEPT	
2	SHEET 1 OF 1	NOTE 2	FINISH: NONE	CONFORMS	VISUAL	ACCEPT	
3	SHEET 1 OF 1	NOTE 3	TOLERANCE: PER DART QSI 018....	CONFORMS	VISUAL	ACCEPT	
4	SHEET 1 OF 1	NOTE 4	UNITS: INCHES UNLESS	CONFORMS	VISUAL	ACCEPT	
5	SHEET 1 OF 1	NOTE 5	BREAK SHARP EDGES....	CONFORMS	VISUAL	ACCEPT	
6	SHEET 1 OF 1	NOTE 6	IDENTIFY WITH DART P/N: D3602-1....	IDENTIFY INK STAMP, D3602-1	VISUAL	ACCEPT	
7	SHEET 1 OF 1	NOTE 7	WEIGHT: 0.97 LBS	CONFORMS	VISUAL	ACCEPT	
8	SHEET 1 OF 1	D3602-1F F/P	2.348	2.323	VERNIER	ACCEPT	
9	SHEET 1 OF 1	D3602-1F F/P	36.25	36.25	VERNIER	ACCEPT	
10	SHEET 1 OF 1	D3602-1F F/P	R .013 TYP	R 0.13 TYP	RADIUS / GA	ACCEPT	
11	SHEET 1 OF 1	D3602-1 ANGLE	3.05	3.05	VERNIER	ACCEPT	
12	SHEET 1 OF 1	D3602-1 ANGLE	R 347 REF	R 347	RADIUS / GA	ACCEPT	
13	SHEET 1 OF 1	D3602-1 ANGLE	36.25 REF	36.25 REF	VERNIER	ACCEPT	
14	SHEET 1 OF 1	SECT A-A	70°	70°	PROTRACTOR	ACCEPT	
15	SHEET 1 OF 1	SECT A-A	R 0.13	R 0.13	RADIUS / GA	ACCEPT	
16	SHEET 1 OF 1	SECT A-A	1.19	1.18	VERNIER	ACCEPT	
17	SHEET 1 OF 1	SECT A-A	1.19	1.19	VERNIER	ACCEPT	

The signature indicates that all characteristics are accounted for, meet drawing requirements, or are properly documented for disposition.

12. Prepared By DALTON HAROLD

13. Date
24 JULY 2014

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			

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Process									
Supplier									
Training									
Transport									
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	Cuffs	Burrs	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled
	Crushing	Contamination	Misaligned/off center	Positioned Wrong	
	Heat Treat	Countersink	Mislabeled	Power Loss/Surge	
	Inspection Strip in Tube	Cut Too Short	Misread		
	Marks/Chatter	Drawing	Off-set		
	Turning Sequence	Drill Holes	Out of Calibration		
	Wave/Twist in Tube	Finish	Out of Sequence		
		Fit/Function			